

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<p><b>Application No.</b> 10/578,180</p>	<p><b>Applicant(s)</b> AMIRZADEH-ASL ET AL.</p>	
	<p><b>Examiner</b> STEFANIE COHEN</p>	<p><b>Art Unit</b> 1793</p>	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 22 January 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 31-48.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☒ Other: PTO-892.

/Melvin Curtis Mayes/  
Supervisory Patent Examiner, Art Unit 1793

Continuation of 11. does NOT place the application in condition for allowance because: Applicant argues the presently claimed process differs from Doliwa's disclosed method in that the claim method only uses one kind of mentioned components and moreover the claim relates to the use of plastic and not simply a hydrocarbon or hydrocarbon- nitrogen compounds.

Applicant respectfully traverses. The claimed invention is considered a comprising claim and therefore more than one component can be used and introduced into a liquid melt.

Further, Doliwa teaches the hydrocarbon compounds can be natural resins. The specification does not disclose a definition for a "plastic" therefore examiner loosely defines the term by conventional definitions.

Patents 6087548, 5540411, 4197221 all disclose a plastic material can be a natural resin. Therefore, Doliwa discloses the use of a plastic.

Further, applicant argues the main difference between the claimed invention and the cited state of the art resides in the different goal. Although this may be true, the prior art still reads on the instant claims as written and therefore would produce the same product even if the reason for combining specific compositions are different.

Applicant argues because the only binder mentioned in the entire document is cement, the combination of Doliwa in view of Coyle does not render the presently claimed invention obvious. Neither naphthalene or carbozol are regarded as plastics. Examiner respectfully traverses. Although applicant discloses the only binder material mentioned in the entire document is cement, Coyle further discloses under some circumstances the use of a binder may be omitted. If titanium containing material is used in a form which is inherently packable, such as shavings or turnings or chips, the carrying element and the titanium material may be formed into a desired shape by means which does not require a binder. Doliwa teaches the binder is optional. The present application does not disclose the use of a binder therefore the optional binder as taught by Doliwa does not effect the combining of the Doliwa and Coyle reference and the rejection still stands. Further, as discussed above, natural resins as disclosed by Doliwa can be considered plastics. Further, Doliwa teaches the use of distillation products such as pitch which can be used in solid or oily forms. Pitch is considered a polymer and therefore can be considered a plastic.

Applicant argues Coyle uses the titanium additive as a grain refiner for an improvement of the strength and machinability of iron castings as well as an eliminator of pin holes and gas holes of that iron castings. Doliwa teaches mixing the titanium and iron together to form a flowing mixture which can be considered a liquid melt. Therefore, there would be motivation to include the titanium as taught by Coyle into a liquid melt as taught by Doliwa to improve the final product properties of the cast iron melts.

Applicant argues methods of introducing a flux into a liquid metal are known; however, it is respectfully submitted that it is new and inventive to bind the components of a flux with a plastic and grinding this product to the presently claimed particle size. Although this may be true, nowhere in the claims does it teach binding the components of a flux with a plastic. Further, Doliwa teaches the use of distillation products such as pitch which can be used in solid or oily forms. Pitch is considered a polymer and therefore can be considered a plastic. Therefore, if the pitch is used in oily form is combined with titanium in the form of shavings, turnings, chips or even slag it would be expected that the components of the flux would bind with a plastic. Further, grinding is a conventional and known in the art technique to obtain a specific particle size of a material.

Applicant argues Jones provides no hint or suggestion that a titanium containing material should be a component of the flux, that a plastic should be used as a binder and that plastic function as reducing agent and/or energy carrier and carbon and/or nitrogen source for the formation of titanium carbide, titanium nitride and titanium carbonitride.

Jones is used specifically to teach a method wherein additives for a slag composition are injected into the slag to control specific properties of the slag.

This reference is used to teach a broad method of injecting additives into a slag. Therefore, this reference can be combined with both Doliwa and Coyle to incorporate an injection method.

Applicant argues Neuer does not disclose a plastic bound flux even in view of Coyle. The presently claimed invention could not be obvious because Coyle discloses the addition of a titanium containing material for a different purpose. Examiner respectfully traverses.

Neuer teaches polyethylene which is a conventional polymer and polymers can be considered plastics. Further, Neuer teaches titanium when used can be combined in the wire filling with the organic polymer. This combination is introduced into a metal melt and therefore can be considered a flux.

Although Coyle discloses the addition of a titanium containing material for a different purpose there is still motivation as taught by Coyle to combine titanium in a flux before injecting into a liquid melt.